Incoming
M/035/0002
Leslie

FORM MR-AR
(Revised 11/2008)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple - Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291
Fax: (801) 359-3940

LARGE MINING OPERATIONS 2014 PROGRESS REPORT

January 1, 2014 to December 31, 2014

The information required in this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, and the rules as under the Utah Minerals Regulatory Program.

1. Mine Permit Number: **M/035/0002**
2. Mine Name: **Bingham Canyon Mine**
3. Name of Operator/Permittee: **Kennecott Utah Copper LLC (KUC)**

Note: If Operator's address, company representative or phone numbers have changed, please provide a replacement page for the Notice of Intention.

4. Mine Location:

Sections 7,8,9,10,11,17,18,19,20,21,30 & 32, Township 1S, Range 2W
Sections 9,11,12,13,14,15,16,22,23,24,25,26 & 36, Township 1S, Range 3W
Sections 4,5,9,10,11,14,15,22,23,27 & 33, Township 2S, Range 2W
Sections 7,17,18 & 19, Township 3S, Range 1W
Sections 4,8,9,13,14,15,16,17,19,20,21,24,25,28,29,30,31 & 32 Township 3S, Range 2W
Sections 11,12,13,14,15,21,22,23,24,25,26,27,33,34,35 & 36, Township 3S, Range 3W
Sections 6 & 7, Township 4S, Range 3W
Sections 1, 2, 3, 11 & 12, Township 4S, Range 3W

5. Report the gross amount of ore mined and waste moved, and the disposition of the materials (onsite stockpiles, sold, waste pile, regraded, etc.):

Mined Ore	**46,999,102**	Tons[a]
Stockpiled Ore	**3,558,096**	Tons[b]
Waste Material Moved	**177,168,866**	Tons[c]
New Disturbance	**423**	Acres
Area Reclaimed	**91**	Acres
Total Disturbed Area	**9980**	Acres[d]

Reviewed DAT 02-02-15

[a]Short tons. Total includes material that was rehandled.
[b]Short tons.
[c]Short tons. Total includes material that was re-handled and/or used for construction projects.
[d]Total mine disturbance from the beginning of mining operations through the end of 2014.

Was the ore shipped off site? If not, where is the ore located?

- *No ore was shipped off site.*
- *Mined ore was either conveyed to the Copperton Concentrator or was stockpiled on site for future processing.*

Where is the waste located?

- *Waste rock was placed on top of existing waste rock disposal areas, around the perimeter of the open pit.*
- *Waste rock was also used for re-establishing roads and other construction projects.*

6. Briefly describe the reclamation work performed during the past year. A map showing reclaimed areas and dates is suggested. (Submit form MR-SITE for an application for full or partial bond/site release).

Bingham Canyon Mine (Bingham Canyon Mine Figure2-1)

1 Enhancements to South End Dumps Storm Water Management

- *A. Constructed new storm water basins in Saints Rest, South Saints Rest, and Castro drainages.*
- *B. Removed and stockpiled topsoil from the Yosemite, Saints Rest, South Saints Rest, and Castro drainages in preparation for placement of additional waste rock at the base of the South Dumps. Top soil is to be used in future reclamation.*
- *C. Finalizing design of storm water modifications for the Yosemite, Olsen, and Butterfield drainages.*

2 East Waste Rock Enhancements

- *A. Removed and stockpiled topsoil along the base of the east dumps in preparation for future potential placement of waste rock and the potential installation/modification of mining infrastructure. Top soil is to be used in future reclamation.*

3 Reclamation Monitoring

- *A. Monitoring for seedling success in Bingham Canyon and other various sites.*
- *B. Evaluation of seed mix success and neighbouring native vegetation.*
- *C. Monitoring of seed fertilization test plots.*
- *D. Physical evaluation of seed mix for impurities.*

Bingham Canyon Mine Keystone Dump area

4 Store & Release Cover

- *A. Technical support provided by Golder Associates.*
- *B. Finalized the collection of meteorological and infiltration data and closed down one of the collection sites.*

South Tailings Area: Enhancements of Existing Reclamation

5 Reclamation enhancements.

- *A. Limestone and biosolids were placed on approximately 53 acres in the South Tailings Impoundment which was previously disturbed by fire.*
- *B. Re-seeding was performed on approximately 43 acres of the South Impoundment*

Copperton Rail Line (Figure Railroad Demolition Activity)

6 Removed Culverts, Regraded and Reseeded

- *A. Removed culverts and re-graded drainages to establish natural contours in drainages adjacent to ATK property along the Copperton Highline.*

B. *Seeded approximately 5 acres near ATK property along the Copperton Highline*

C. *Placed additional soil and re-seeded approximately 10 acres near the site of the historic Bonneville Crusher and the Copperton Highline.*

7. **Include an updated map depicting surface disturbance and reclamation performed during the year**, prepared in accordance with Rule R647-4-105.

- *The following attachments are provided to detail 2014 reclamation activities:*
  - *2014 UDOGM Annual Reclamation Reporting Register*
  - *Bingham Canyon Mine Figure 2-1*
  - *Figure "South Dump Soil Salvage and Stockpile Locations"*
  - *Figure " East Dump Soil Salvage and Stockpile Locations"*
  - *Figure "Railroad Demolition Activity"*
  - *Figure "September 13, 2013 Storm Event Response Figure 1 Location Map of Work Plan Areas"*

I hereby certify, under penalties of law, the information provided in this report is true and correct to the best of my knowledge and belief.

Name (Typed or Print): Steve Schnoor

Title of Operator: Director – Land, Water, and Energy

Signature of Operator: _____ for Steve Schnoor

Date: **January 30, 2015**

pb

H:\DOGM\Annual Reporting\2010\BCM M-035-002\File02-2010M-035-002BinghamCanyonMineUDNR-DOGMFormMR.doc

M&RP	PLANT	AREA / PROJECT	2014																		
			Planned[1,3]									Additional									
			BAT	Experimental	Demolition	Status	% Complete				$ Expenditure[2]	BAT	Experimental	Demolition	Status	% Complete				$ Expenditure[2]
							Q1	Q2	Q3	Q4						Q1	Q2	Q3	Q4	
M/035/0002	Bingham Canyon	South End Dumps	(1) Design Storm Water Basins for several drainages associated with the South Dumps. (2) Construct new storm water basins in these drainages. (3) Remove top soil/growth media from several of the drainages associated with the South Dumps. (4) Place additional mine waste rock at the base of the South Dumps to address past storm water issues.						(1)75% (2)25% (3) 25% (4) 0%	**(1)** 100% **(2)** 100% **(3)** 100% (4) 0%	$ 5,443,394									
M/035/0002	Bingham Canyon	Various test plots & established vegetation at Bingham Canyon Mine (BCM)	Vegetation Monitoring **(1)** Various test plots associated with BCM **(2)** monitoring for seedling success associated with Bingham Canyon Reclamation **(3)** Vegetation condition monitoring across BCM (native and reclaimed)						**(1)** 0% **(2)** 0% **(3)** 100%	**(1)** 0% **(2)** 30% **(3)** 100%	$ 50,000									
M/035/0002	Bingham Canyon	Store and Release Cover (Keystone)		**(1)** Field visit by Consultant and continued technical support **(2)** Continue to collect meteorological and infiltration data **(3)** Decommission Keystone site according to Mine Plan						**(1)** 100% **(2)** 100% **(3)** 100%	$ 3,800									
M/035/0002	Bingham Canyon	Reclamation Quality Assessment and Program		**(1)** Enhance mapping of reclaimed areas **(2)** Field verification/inspection of 80% of reclaimed areas **(3)** Field testing of statisical methodology for success and failure				**(1)** 10% **(2)** 50% **(3)** 40%	**(1)** 40% **(2)** 100% **(3)** 40%	**(1)** 100% **(2)** 100% **(3)** 100%	$ 50,000									
M/035/0003	Bingham Canyon	East Waste Rock Expansion		**(1)** Salvage and stockpile native soils associated with the planned placement of additional waste rock at the base of the East Dumps **(2)** Place additional waste rock at the base of the East Dumps.				**(1)** 75% **(2)** 0%	**(1)** 75% **(2)** 0%	**(1)** 75% **(2)** 0%	-	**(1)** Project is placed on hold while recovery from Manefay Slide is underway **(2)** Place temporary seed mix in stripped areas and top soil stockpiles as needed to manage weeds and stormwater					**(1)** 100% **(2)** 100%	**(1)** 100% **(2)** 100%	**(1)** 100% **(2)** 100%	-
M/035/0002	Ore Haulage	Abandonment of 6.0 Miles of Track - Copperton High Line			**(1)** Finish Regrading and revegetating 1.5 miles	**(1)** 1.5 miles regraded/reclaimed		**(1)** 0%	**(1)** 0%	**(1)** 100%	$ 86,325									
M/035/0002	South Tailing	Noxious Weed Treatment	Spot treatment for noxious weeds					50%	100%	100%	$ 500									

M/035/0002	South Tailing	Enhancement of Existing Reclamation										(1) 43 acres were seeded and fertilized in Area 1 of the South Impoundment which had been previously disturbed with a new pipeline project. Biosolids was applied to 30 acres in this area. (2)) 53.2 acres which had a fire on it in 2014 was treated with Limestone/Biosolids and disced. Herbicide application and seeding is planned in this area in 2015.						(1) 50%	(1) 100% (2) 100%	$ 170,209
M/035/0009	Barneys Canyon	Clay Hollow Drainage										(1) Perform environmental cleanup of released mine sediment (2) Re-grade and reseed areas where cleanup occurred					(1) 0% (2) 0%	(1) 75% (2) 0%	(1)100% (2) 100%	$ 1,209,308
M/035/0009	Barneys Canyon	Noxious Weed Treatment	(1) Top Soil Stockpiles (2) Reclaimed Areas (3) New RMP road					(1) 50% (2) 50% (3) 50%	(1) 100% (2) 100% (3) 100%	(1) 100% (2) 100% (3) 100%	$ 500									
M/035/0011	Concentrator	Noxious Weed Treatment	Pipeline area					50%	100%	100%	$ 500									
M/035/0015	North Tailing (Kennecott Utah Copper Tailing)	Entire	1) 35 acres of (18") of soil to be placed on the North slope of the North Impoundment. (2) Seed to be added to 32.5 acres of the north slope of the North Impoundment.					(1) 0% (2) 0%	(1) 0% (2) 0%	(1) 100% (2) 100%	$ 2,137,346									
M/045/0004	Carr Fork, Pine Canyon	Entire	None currently planned																	

[2012] Board Presentation and/or 2013 Reclamation Activities Plan

[2] Expend a minimum average, of $50,000 – 1978 dollars per year for each three year period, in maintaining a program of experimentation and in the application of BAT toward rehabilitation of land.
Mine BAT/Rec includes rental, maintenance and operation of equipment, seed/seedling, fertilizer/mulch/limestone application and purchase,

[3] Information incorporates GHG reclamation activities assessment

112°12'0"W 112°11'0"W 112°10'0"W 112°9'0"W 112°8'0"W 112°7'0"W 112°6'0"W 112°5'0"W 112°4'0"W

40°36'0"N 40°35'0"N 40°34'0"N 40°33'0"N 40°32'0"N 40°31'0"N 40°30'0"N 40°29'0"N 40°28'0"N 40°27'0"N

Area	Description
1	Kennecott UCD Office Building
2	Small Bingham Reservoir
3	Copperton Rail Yard
4	Large Bingham Reservoir
5	Geology Building / Core Storage Buildings
6	Precipitation Plant
7	Midas Storage
8	Lark Buildings
9	Pit Conveyor Portal
10	Copperton Conveyor Portal
11	6190 Miscellaneous Buildings
12	Ore and Product Stockpile
13	Ore Conveyor and 5490 Tunnel
14	East Pump Station
15	Storage Area
16	Wasterock Disposal Area
17	Dyno Nobel Office and Shops
18	Process Water Tank
19	Copperton Concentrator (not included in this permit)
20	In-Pit Crusher
21	Change House
22	Code 80 Fuel & Lube Station
23	North Ore Shoot Shaft
24	Carr Fork Exhaust Shaft & Pine Canyon Tunnel
25	Utah Metals Tunnel
26	Desilting Basin
27	Apex Shaft
28	La Granja Pilot Plant
29	Kennecott Reverse Osmosis Plant
30	Main Substation
31	Burma Road
32	Lark Gate Mine Entrance and Buildings
33	Primary Mine Access Road
34	Truck Shop (6190)
35	Employee Parking
36	6880 Truck Shop
37	6880 Change House and Buildings
38	New Rock Crusher
39	Code 85 Barrel Storage and Wash Pad
40	SX/EW Pilot Plant
41	Non Potable Water Tank and Facilities
42	Pump Station
43	SAWS Office and Maintenance
44	East Side Reservoir

The information on this map is based on the most current information available to Kennecott and should be used for planning purposes only. No warranty expressed or implied is made regarding the accuracy or utility of the data for general or scientific purposes, nor shall the act of distribution constitute any such warranty.

NOTE: Imagey dates 2013, 2011.
Scale expressed as relative fraction.

REV 1
Rev Date 5/2/2014

1:50,000

0 1,000 2,000 4,000 Feet
0 270 540 1,080 Meters

5/2/2014 12:14:24 PM
Path: C:\Data\2014\20140501_Data_Requests\Bingham_Canyon_Mine_Figure2-1.mxd
User: gordon.douglass

Permit Boundary
Eastside Storm and Leach Water Collection
Ore Conveyor
Kennecott Facilities

Rio Tinto

Kennecott Utah Copper

FIGURE 2-1
BINGHAM CANYON MINE FACILITIES
BINGHAM CANYON MINE, KUC
PERMIT # M/035/0002

N
W E
S

0 0.1 0.2 0.3 MI

0 500 1,000 1,500 FT

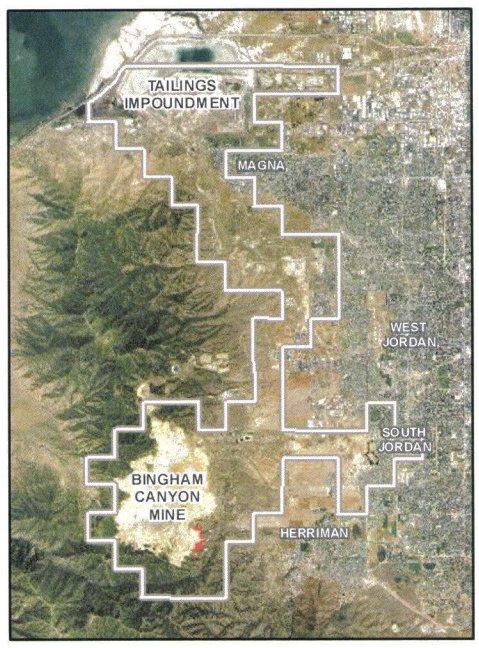
LEGEND

STOCKPILE LOCATIONS

AREA OF TOPSOIL/GROWTH MEDIA REMOVAL

M\035\0002 PERMIT BOUNDARY

SITE MAP



Rio Tinto
Kennecott Copper

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COORDINATE SYSTEM: NAD 1927 UTM ZONE 12N

BINGHAM CANYON MINE (M\035\0002)

SOUTH DUMP SOIL SALVAGE AND STOCKPILE LOCATIONS

N
W E
S

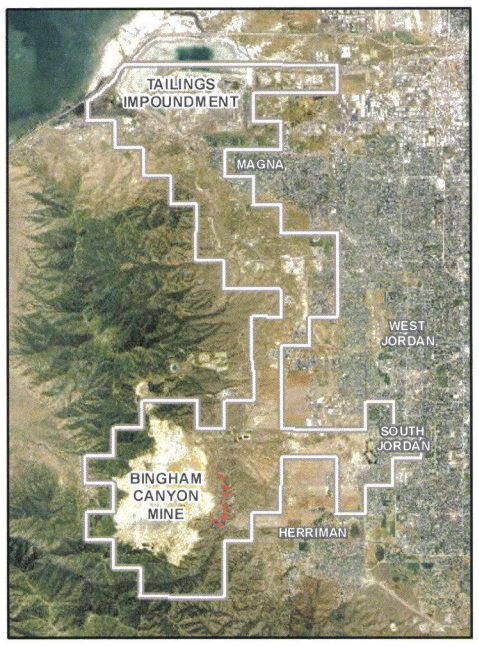
0 0.1 0.2 0.3 MI

0 500 1,000 1,500 FT

LEGEND

- AREA OF TOPSOIL/GROWTH MEDIA REMOVAL
- STOCKPILE LOCATIONS
- M\035\0002 PERMIT BOUNDARY

SITE MAP



Rio Tinto
Kennecott Copper

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COORDINATE SYSTEM: NAD 1927 UTM ZONE 12N

BINGHAM CANYON MINE (M\035\0002)

EAST DUMP SOIL SALVAGE AND STOCKPILE LOCATIONS

N
W E
S

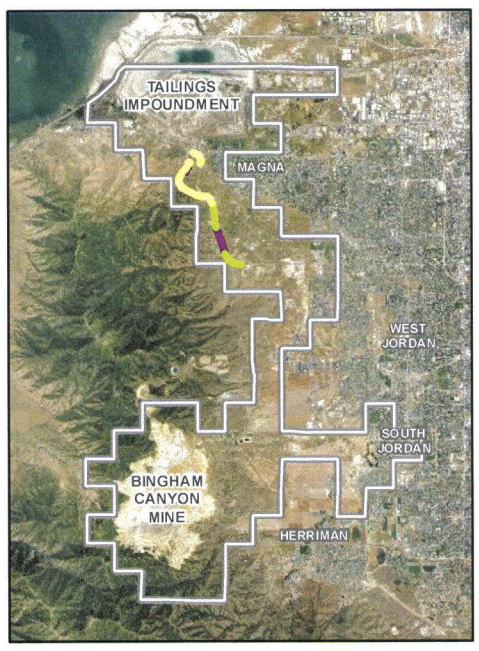
0 0.1 0.2 0.3 0.4 0.5 MI

0 1,000 2,000 3,000 FT

LEGEND

- 2013 RECONTOUR AND RESEEDING
- 2014 RECONTOUR AND RESEEDING
- INTERMITTENT SEEDING
- M\035\0002 PERMIT BOUNDARY

SITE MAP



Rio Tinto
Kennecott Copper

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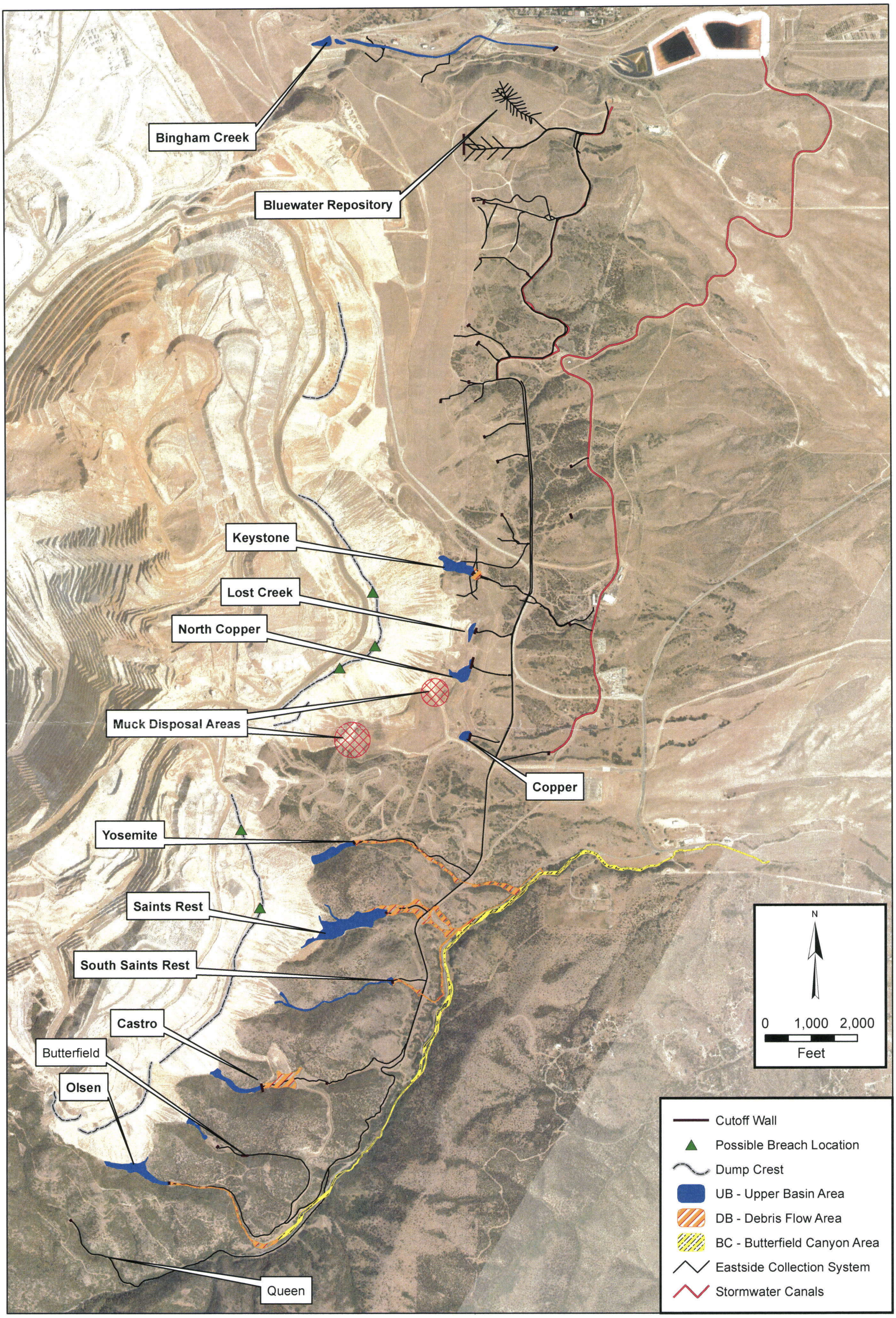
BINGHAM CANYON MINE (M\035\0002)

RAIL ROAD DEMOLITION ACTIVITY



Designed By: JI	Rio Tinto **KENNECOTT UTAH COPPER** ENVIRONMENTAL	SEPTEMBER 13, 2013 STORM EVENT RESPONSE FIGURE 1 LOCATION MAP OF WORK PLAN AREAS
Drawn by: JI		
Project Eng:	Dwg No.: FIG1_WORK PLAN AREAS	
Project Manager:	Project: STORM EVENT 9/13/2013	

Rio Tinto

Kennecott Utah Copper
4700 Daybreak Parkway
South Jordan, Utah 84095
801-204-2128 (o)
801-569-7192 (f)

Steve Schnoor
Director – Land, Water, and Energy

30 January 2015

Mr. Paul Baker, Minerals Program Manager
Division of Oil, Gas & Mining
Utah Department of Natural Resources
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Attn: Ms. Leslie Heppler

Subject: **Large Mining Operations 2014 Annual Report**
January 1, 2014 to December 31, 2014
M/035/0002
Bingham Canyon Mine

Dear Mr. Baker:

Please find attached Form MR-AR for permit number M/035/0002, Bingham Canyon Mine.

Reference maps are included with this annual report, as well as the KUC document UDOGM Annual Reporting Register through Q4 2014.

KUC is also providing updated information regarding mining activities performed in 2014 (Attachment A) not specifically addressed on Form MR-AR for M/035/0002.

If you have any questions about these annual reports, please contact Thiess Lindsay at 801.569.6066.

Sincerely,

For Steve Schnoor

Steve Schnoor
Director – Land, Water, and Energy

Cc: Dana Dean (UDOGM)

Attachment A

Title:

Update of Mining Activities Related to Bingham Canyon Mine Operations (M/035/0002)

Context:

The division has been briefed in various capacities throughout the year regarding new and/or continued mining activities related to the Bingham Canyon Mine operation.

Purpose:

The intent of this update is to provide the division with a brief summary of mining related activities completed or ongoing throughout the year.

Summary of Activities (not addressed on Form MR-AR):

- Chalcopyrite Heap Leach Project (CHLP)
    - Pilot scale copper heap leach facility including pilot SX/EW plant (work not associated with leaching at Bingham) is located in Dry Fork Canyon atop existing historic waste rock.
    - The pilot facility began operation under leach in Q1-2012 and continued to operate until Q4 2014.
    - In Q4, the facility ceased operations and transitioned into care and maintenance until operations resume at a future time.
    - The facility is being monitored to ensure compliance with existing permits.
- Clean up of Debris Flow in Butterfield Drainage (see Figure "September 13, 2013 Storm Event Response Figure 1").
    - In September 2013, debris flow occurred from certain waste rock disposal areas that report to the Butterfield Drainage.
    - Cleanup efforts immediately commenced in 2013 and continued into 2014. Clean up activities include the re-establishment of sediment basins, removal of impacted sediment, re-grading, and reseeding.
    - Riparian response on Butterfield Creek began in Q2 2014. Response activities include the installation of sediment control features, re-establishment of a downstream de-silting basin, removal of impacted sediments, and reseeding. Additional reseeding was completed in Q4 2014.
- Common Access Decline / North Wall Drainage Gallery
    - North Wall Drainage Gallery access completed up to 3050' prior to Manefay slide event.
    - Mid-Slope drill commenced in Q1 2013 with the near completion of the first set of drainage holes
    - The 7951ft Common Access Decline will be completed in April 2015
    - 57, 580ft of Midslope drilling has been completed and has been very successful
    - A ventilation raise was installed in 2014
    - The development of the North Wall Drainage Gallery will commence at the completion of the Common Access Decline (April 2015)

- The North Wall Drainage Gallery consists of 2916ft of Centerline Development, 1895ft of Off-Centerline Development and 189,000ft of dewatering drilling

- South Wall Drainage Gallery
  - South Wall Drainage Gallery decline completed up to 1895' prior to Manefay slide event.
  - South wall depressurization drilling was expected to commence in Q3 2013, however was delayed due to the Manefay slide event
  - 8615ft of the 12050ft of development has been completed on the South Wall Drainage Gallery
  - 50,600ft of the 478,800ft of dewatering drilling has been completed

- 4590 Recovery Decline
  - Recovery decline development commenced in July 2013 in response to regain access to the South Wall Drainage Gallery (SWDG) and Common Access Decline (CAD) in response to the Manefay slide
  - 1660' of development was completed to regain access to the CAD by EOY 2013
  - 770' of development was completed to regain access to the SWDG by EOY 2013
  - The recovery decline was completed in 2014 and access to the SWDG and the CAD was re-established.
- North Ore Shoot Shaft / Integrated Skarns Order of Magnitude Study
  - An order of magnitude study commenced on the strategy of developing a number of Skarn deposits in close proximity to the previously investigated North Rim Skarn deposit
  - Shaft rehabilitation (stripping) completed to the 4500' level
  - Shaft rehabilitation was put on hold in Q4 and will remain in the care and maintenance state until further notice
  - This study has been put on hold.
- Integrated Skarn Project
  - A new Order of Magnitude Study commenced to evaluate various underground Skarns options
  - This study is due to go to pre-feasability phase in Q2 2015